USPTO Intranet   Home Index Resources Contacts Internet Search

Scientific and Technical Information Center

Patent Intranet > NPL Virtual Library   <u>Site Feedback</u>

| NPL Virtual Library Home | About STIC | STIC Catalog | Site Guide | EIC | Automation Training/ITRPs | Contact Us | STIC Staff | FAQ |

NPL Services for Examiners

<u>Oxford English Dictionary</u>

Monday, August 8, 2005

STIC's mission is to connect examiners to critical prior art by providing information services and access to NPL electronic resources and print collections. A <u>STIC facility</u> is located in each Technology Center.

Most of the electronic resources listed on this site are accessed via the Internet. **Please obey USPTO "Rules of the Road (<u>PDF</u> <u>Text</u>)" when using Internet resources.**

Specialized Information Resources for Technology Centers

Select a Technology Center

| TC2100 ▼ | GO |

Information Resources and Services

<u>List of Major E-Resources</u>
<u>List of eJournal and eBook Titles</u>
<u>Reference Tools</u>
<u>Legal Resources</u>
<u>Nanotechnology</u>
<u>STIC Online Catalog</u>
<u>PLUS System</u>
<u>Foreign Patent Services</u>
<u>Translation Services</u>
<u>Trademark Law Library</u>

Request STIC Services from your Desktop

<u>Request a Search</u>
<u>Request Delivery of a Book or Article</u>
<u>Request Purchase of a Book/Journal</u>
<u>Request Foreign Patent Document</u>
<u>Request a Translation</u>
<u>Request PLUS Search</u>

 Home Index Resources Contacts Intranet Search

Scientific and Technical Information Center

TC2100: EIC Resources and Services

Monday, August 8, 2005

These resources and services provide examiners with access to critical prior art. Most of the electronic resources listed on this page are accessed via the Internet. **Please obey USPTO "Rules of the Road (PDF Text)" when using Internet resources.**

📖 indicates tools featured in TC's NPL training.

Information Resources

Information Resources by Class and Subclass

Databases

📖 ACM Digital Library
Business Source Corporate
> (Multidisciplinary subject coverage)

Dialog Classic on the Web
> (Training and password required.)

DTIC STINET
> (Citations of Defense Technical Information Center scientific and technical documents)

EEDD Submission Form
Examiners' Electronic Digest Database (EEDD)
> (Database of examiner submitted NPL)

GrayLIT Network
> (Multidisciplinary database of scientific and technical information from DTIC, NASA, DOE, and EPA)

📖 IEEE Xplore
> (Full page images of over 800,000 Electrical & Electronic Engineering articles, papers and standards, 1988 - present. Select content is available from 1952-1987.)

IEEE Xplore Tutorial
INSPEC
> (Seven million well-indexed physics, EE, and IT abstracts, 1969-present)

IP.com
> (Defensive disclosures published to the Disclosures IP.com database from various websites)

NTIS (National Technical Information Service)
> (resource for government-funded scientific, technical, engineering, and business related information)

ProQuest Digital Dissertations
Proquest Direct
> (Multidisciplinary subject coverage)

Research Disclosure
> (Published monthly as a paper journal and now as an online database product with advanced full

text searching capabilities for defensive disclosure information.)
ScienceDirect [Search Guide]
    (scientific, technical, and medical journals)
Software Patent Institute (SPI) (Select "Free Access").
    (Searchable database of Software Technologies.)
SPIE Digital Library
    (journals and proceedings on optics and photonics)
STN on the Web (training and password required)
    (The other link is via the Patent Examiner's Toolkit. On your computer, click on the START button, then on the PE Toolkit, then on STN Express.)
True Query
    (A resurrected version of the old "Computer Select" database, providing full text access to over 100 technology focused publications, a glossary of technical terms, product reviews and over 60,000 product specifications from 1999 to the present. If html code appears on your screen, click browser's "Reload" or "Refresh" button.)

Books and Journals

Search STIC Online Catalog
InfoSECURITYnetBASE
    (Information security)
Knovel
    (Applied science and engineering)
NetLibrary.com
    (Multidisciplinary subject coverage)
Safari Online Books
    (Computer and information technology)
Springer Publishing Company
    (biotech, physics, and computer journals)

Daily Newspapers

Fulltext newspaper articles are available electronically in Proquest Direct.

CD-ROM Resources

Older full text NPL resources/articles received in CD-Rom format. These resources are available on EIC2100 PCs in CPK2, 4B40.

Equipment

Fax (571-273-0044)
Optical Scanners
    - Use OmniPage Pro software to scan your documents.
Power Mac G3
Photocopier

Reference Tools

Bartleby.com
    (Several versions of Roget's Thesaurus, a dictionary, an encyclopedia, quotations, English usage books and more.)
Computer References
    (Dictionaries, Acronyms Finders, Encyclopedias)
Efunda
    (30,000 pages of engineering fundamentals and calculators)
Encyclopedia Britannica
Encyclopedia of Software Engineering
Eric Weisstein's World of Mathematics
    (A comprehensive online encyclopedia of mathematics.)

HowStuffWorks
   (Search a term to find articles that explain how it works.)
The Internet Encyclopedia
Over 2000 Glossary Links
   (Links to numerous technical, specialty, and general glossaries.)
PCWebopedia
Thomas Register
Wiley Encyclopedia of Electrical and Electronics Engineering
Xreferplus
Yourdictionary.com
   (Numerous "specialty dictionaries"... technological, law, business related and more.)

Services

EIC2100 Staff
Foreign Patent Services
PLUS
Request a PLUS Search
   [IFW case]   [Paper case]
Request a Book/Journal Purchase
Request a Book or Article
Request a Foreign Patent Publication
   [e-submit]   [Printable form]
Request a Search
   [e-submit]   [Printable form]
   Fast & Focused Search Criteria
STIC Online Catalog
Translation Services

Web Resources

A Brief History of the Hard Disk Drive

CiteSeer (ResearchIndex)
   (Full text scientific research papers - in pdf and postscript formats.)
Interfacebus.com
   (Listing of Electronic Interface Buses with links to standards and specifications.)
Internet Engineering Task Force
   (The IETF Secretariat, run by The Corporation for National Research Initiatives with funding from
   the US government, maintains an index of Internet-Drafts.)
Nanotechnology
PCI Specifications (username: uspto; password: pat222)
   ("Peripheral Component Interconnect" specifications and white papers.)
Requests for Comments (RFCs) Database
   (Requests for Comments (RFC) document series is a set of technical and organizational
   notes about the Internet (originally the ARPANET), beginning in 1969 and discussing many
   aspects of computer networking, including protocols, procedures and concepts as well as
   meeting notes and opinions.)
Scirus

Usenet Archive (Google Groups)

Wayback Machine
   (Archived web pages.)

Submit comments and suggestions to Anne Hendrickson   To report technical problems, click here

Intranet Home ⋮ **Index** ⋮ **Resources** ⋮ **Contacts** ⋮ **Internet** ⋮ **Search** ⋮ **Firewall** ⋮ **Web Services**

Last modified 07/01/2005 09:25:59

IEEE *Xplore*
RELEASE 2.1

Welcome United States Patent and Trademark Office

1,194,402 documents online

BROWSE   SEARCH   IEEE XPLORE GUIDE

Welcome to IEEE Xplore

... delivering full text access to the world's highest quality technical literature in electrical engineering, computer science, and electronics.

Browse

» Journals & Magazines
» Conference Proceedings
» Standards
» Books

Basic Search

[   ] »

(All Fields)

» Advanced Search
» Author Search
» CrossRef Search

Content Updates
Browse the latest update to see recently added content.
» Latest Content Update

Alerts
Register and access your tables of contents alerts.
» Visit Alerts

Top 100 Documents
Find out the most accessed documents for the month.
» View Top 100

Books
IEEE books are av purchase from Wil and Wiley-IEEE C Press.
» Find out more
» Browse Books

Cookies Enabled

Indexed by
Inspec

Help   Contact Us   Privacy & :

Advanced Search   BROWSE   SEARCH   IEEE XPLORE GUIDE

OPTION 1
Enter keywords or phrases, select fields, and select operators

[   ] In All Fields ▲▼

[AND ▼] [   ] In All Fields ▲▼

[AND ▼] [   ] In All Fields ▲▼

[   ] [   ]

OPTION 2
Enter keywords, phrases, or a Boolean expression

```
radial <near> basis <and> neural <near>
network <and> predicting <and> (age <or>
aging)
```
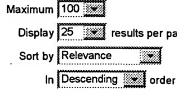
[   ] [   ]

» Note: You may use the search operators <and> or <or>
without the start and end brackets <>.

» Learn more about Field Codes, Search Examples, and Search Operators

» Publications

◉ Select publications

☑ IEEE Periodicals

☑ IEE Periodicals

☑ IEEE Conference Proceedir

☑ IEE Conference Proceeding

☑ IEEE Standards

» Other Resources (Available for Pur

☑ IEEE Books

» Select date range

○ Search latest content update (08

◉ From year [All ▼]

to [Present ▼]

» Display Format

◉ Citation   ○ Citation & Abstr

» Organize results

Maximum [100 ▼]

Display [25 ▼] results per pa

Sort by [Relevance ▼]

In [Descending ▼] order

Help   Contact Us   Privacy &

© Copyright 2005 IEEE --

USPTO Intranet   Home   Index   Resources   Contacts   Internet   Search

Scientific and Technical Information Center

Patent Intranet > NPL Virtual Library > EIC2100   <ins>Site Feedback</ins>

| NPL Virtual Library Home | About STIC | STIC Catalog | Site Guide | EIC | Automation Training/ITRPs | Contact Us | STIC Staff | FAQ |

TC2100: EIC Resources and Services

Monday, August 8, 2005

These resources and services provide examiners with access to critical prior art. Most of the electronic resources listed on this page are accessed via the Internet. **Please obey USPTO "Rules of the Road (PDF Text)" when using Internet resources.**

indicates tools featured in TC's NPL training.

Information Resources

Information Resources by Class and Subclass

Databases

ACM Digital Library
Business Source Corporate
(Multidisciplinary subject coverage)
Dialog Classic on the Web
(Training and password required.)
DTIC STINET
(Citations of Defense Technical Information Center scientific and technical documents)
EEDD Submission Form
Examiners' Electronic Digest Database (EEDD)
(Database of examiner submitted NPL)
GrayLIT Network
(Multidisciplinary database of scientific and technical information from DTIC, NASA, DOE, and EPA)

IEEE Xplore
(Full page images of over 800,000 Electrical & Electronic Engineering articles, papers and standards, 1988 - present. Select content is available from 1952-1987.)
IEEE Xplore Tutorial
INSPEC
(Seven million well-indexed physics, EE, and IT abstracts, 1969-present)
IP.com
(Defensive disclosures published to the Disclosures IP.com database from various websites)
NTIS (National Technical Information Service)
(resource for government-funded scientific, technical, engineering, and business related information)
ProQuest Digital Dissertations
Proquest Direct
(Multidisciplinary subject coverage)
Research Disclosure
(Published monthly as a paper journal and now as an online database product with advanced full

text searching capabilities for defensive disclosure information.)
ScienceDirect [Search Guide]
> *(scientific, technical, and medical journals)*

Software Patent Institute (SPI) (Select "Free Access")
> *(Searchable database of Software Technologies.)*

SPIE Digital Library
> *(journals and proceedings on optics and photonics)*

STN on the Web (training and password required)
> *(The other link is via the Patent Examiner's Toolkit. On your computer, click on the START button, then on the PE Toolkit, then on STN Express.)*

True Query
> *(A resurrected version of the old "Computer Select" database, providing full text access to over 100 technology focused publications, a glossary of technical terms, product reviews and over 60,000 product specifications from 1999 to the present. If html code appears on your screen, click browser's "Reload" or "Refresh" button.)*

Books and Journals

Search STIC Online Catalog
InfoSECURITYnetBASE
> *(Information security)*

Knovel
> *(Applied science and engineering)*

NetLibrary.com
> *(Multidisciplinary subject coverage)*

Safari Online Books
> *(Computer and information technology)*

Springer Publishing Company
> *(biotech, physics, and computer journals)*

Daily Newspapers

Fulltext newspaper articles are available electronically in Proquest Direct.

CD-ROM Resources

Older full text NPL resources/articles received in CD-Rom format. These resources are available on EIC2100 PCs in CPK2, 4B40.

Equipment

Fax (571-273-0044)
Optical Scanners
> - Use OmniPage Pro software to scan your documents.

Power Mac G3
Photocopier

Reference Tools

Bartleby.com
> *(Several versions of Roget's Thesaurus, a dictionary, an encyclopedia, quotations, English usage books and more.)*

Computer References
> *(Dictionaries, Acronyms Finders, Encyclopedias)*

Efunda
> *(30,000 pages of engineering fundamentals and calculators)*

Encyclopedia Britannica
Encyclopedia of Software Engineering
Eric Weisstein's World of Mathematics
> *(A comprehensive online encyclopedia of mathematics.)*

HowStuffWorks
(Search a term to find articles that explain how it works.)
The Internet Encyclopedia
Over 2000 Glossary Links
(Links to numerous technical, specialty, and general glossaries.)
PCWebopedia
Thomas Register
Wiley Encyclopedia of Electrical and Electronics Engineering
Xreferplus
Yourdictionary.com
(Numerous "specialty dictionaries"... technological, law, business related and more.)

Services

EIC2100 Staff
Foreign Patent Services
PLUS
Request a PLUS Search
[IFW case]   [Paper case]
Request a Book/Journal Purchase
Request a Book or Article
Request a Foreign Patent Publication
[e-submit]   [Printable form]
Request a Search
[e-submit]   [Printable form]
Fast & Focused Search Criteria
STIC Online Catalog
Translation Services

Web Resources

A Brief History of the Hard Disk Drive

CiteSeer (ResearchIndex)
(Full text scientific research papers - in pdf and postscript formats.)
Interfacebus.com
(Listing of Electronic Interface Buses with links to standards and specifications.)
Internet Engineering Task Force
(The IETF Secretariat, run by The Corporation for National Research Initiatives with funding from
the US government, maintains an index of Internet-Drafts.)
Nanotechnology
PCI Specifications (username: uspto; password: pat222)
("Peripheral Component Interconnect" specifications and white papers.)
Requests for Comments (RFCs) Database
(Requests for Comments (RFC) document series is a set of technical and organizational
notes about the Internet (originally the ARPANET), beginning in 1969 and discussing many
aspects of computer networking, including protocols, procedures and concepts as well as
meeting notes and opinions.)
Scirus

Usenet Archive (Google Groups)

Wayback Machine
(Archived web pages.)

Submit comments and suggestions to Anne Hendrickson   To report technical problems, click here
∼∼

Intranet Home ¦ **Index** ¦ **Resources** ¦ **Contacts** ¦ **Internet** ¦ **Search** ¦ **Firewall** ¦ **Web Services**

Last modified 07/01/2005 09:25:59

PORTAL

USPTO

Search: ⦿ The ACM Digital Library   ○ The Guide

THE ACM DIGITAL LIBRARY

Full text of every article ever published by ACM.

- **Using the ACM Digital Library**

  - **Frequently Asked Questions (FAQ's)**

Recently loaded issues and proceedings:
(available in the DL within the past 2 weeks)

ACM Transactions on Algorithms (TALG)
Volume 1 Issue 1

ACM Transactions on Applied Perception (TAP)
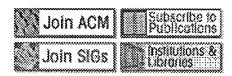Volume 2 Issue 3

ACM Transactions on Graphics (TOG)
Volume 24 Issue 3

ACM Transactions on Programming Languages and
Systems (TOPLAS)
Volume 27 Issue 4

Feedback

- Report a problem
- Take our Satisfaction survey

Join ACM   Subscribe to Publications

Join SIGs   Institutions & Libraries

- **Advanced Search**
- **Browse the Digital Library:**
  - Journals
  - Magazines
  - Transactions
  - Proceedings
  - Newsletters
  - Publications by Affiliated Organizations
  - Special Interest Groups (SIGs)

Personalized Services: Login required

My Binders
Save search results and queries. Share binders with colleagues and build bibliographies.

TOC Service
Receive the table of contents via email as new issues or proceedings become available.

Google

CrossRef Search
Pilot program to create full-text interpublisher searchability.

Computing Reviews

Access critical reviews of computing literature.

THE GUIDE TO COMPUTING LITERATURE

Bibliographic collection from major publishers in computing.
Go to The Guide

P☉RTAL
USPTO

Search: ⦿ The ACM Digital Library   ○ The Guide

+"radial basis" +"neural network" +(predict or predicting)

THE ACM DIGITAL LIBRARY

Full text of every article ever published by ACM.

- **Using the ACM Digital Library**

  - Frequently Asked Questions (FAQ's)

Recently loaded issues and proceedings:
(available in the DL within the past 2 weeks)

ACM Transactions on Algorithms (TALG)
Volume 1 Issue 1

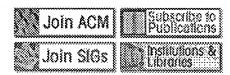ACM Transactions on Applied Perception (TAP)
Volume 2 Issue 3

ACM Transactions on Graphics (TOG)
Volume 24 Issue 3

ACM Transactions on Programming Languages and
Systems (TOPLAS)
Volume 27 Issue 4

Feedback

- Report a problem
- Take our Satisfaction survey

Join ACM   Subscribe to Publications
Join SIGs   Institutions & Libraries

- **Advanced Search**
- **Browse the Digital Library:**
  - Journals
  - Magazines
  - Transactions
  - Proceedings
  - Newsletters
  - Publications by Affiliated Organizations
  - Special Interest Groups (SIGs)

Personalized Services: Login required

My Binders
Save search results and queries. Share binders with colleagues and build bibliographies.

TOC Service
Receive the table of contents via email as new issues or proceedings become available.

Google

CrossRef Search
Pilot program to create full-text interpublisher searchability.

Computing Reviews

Access critical reviews of computing literature.

THE GUIDE TO COMPUTING LITERATURE

Bibliographic collection from major publishers in computing.
Go to The Guide

P⊘RTAL
USPTO

Search: ⦿ The ACM Digital Library   ○ The Guide

+"radial basis" +"neural network" +(predict or predicting)

THE ACM DIGITAL LIBRARY

⚡ Feedback Report a problem Satisfaction survey

Terms used **radial basis** **neural network** **predict** or **predicting**   Found **100** of **158,639**

| Sort results by | relevance ▼ |
| Display results | expanded form ▼ |

❖ Save results to a Binder
🔲 Search Tips
☐ Open results in a new window

Try an Advanced Search
Try this search in The ACM Guide

Results 1 - 20 of 100   Result page: **1** 2 3 4 5 6   next

Relevance scale ☐ ◰ ◼ ◼ ◼

1 Real world applications: A pareto archive evolutionary strategy based radial basis function neural network training algorithm for failure rate prediction in overhead feeders ◼

Grant Cochenour, Jerad Simon, Sanjoy Das, Anil Pahwa, Surasish Nag
June 2005 **Proceedings of the 2005 conference on Genetic and evolutionary computation GECCO '05**

Full text available: 📄 pdf(369.75 KB)   Additional Information: full citation, abstract, references, index terms

This paper outlines a radial basis function neural network approach to predict the failures in overhead distribution lines of power delivery systems. The RBF networks are trained using historical data. The network sizes and errors are simultaneously minimized using the Pareto Archive Evolutionary Strategy algorithm. Mutation of the network is carried out by invoking an orthogonal least square procedure. The performance of the proposed method was compared to a fuzzy inference approach and with mu ...

Keywords: multi-objective optimization, neural networks, pareto archive evolutionary strategy, power system reliability, radial basis function

2 Predicting acid concentrations in processing plant effluent: an application of time series prediction using neural networks ◼

Antonette M. Logar, Edward M. Corwin, William J. B. Oldham
March 1992 **Proceedings of the 1992 ACM/SIGAPP symposium on Applied computing: technological challenges of the 1990's**

Full text available: 📄 pdf(678.48 KB)   Additional Information: full citation, references, index terms

3 The development of a methodology for the use of neural networks and simulation modeling in system design ◼

Mahdi Nasereddin, Mansooreh Mollaghasemi
December 1999 **Proceedings of the 31st conference on Winter simulation: Simulation---a bridge to the future - Volume 1**

Full text available: 📄 pdf(63.14 KB)   Additional Information: full citation, references, index terms

4 Special issue on the MAMA 2002 workshop: Automatic and portable performance modeling for parallel I/O: a machine-learning approach ◼

Shengke Yu, Marianne Winslett, Jonghyun Lee, Xiaosong Ma
December 2002 **ACM SIGMETRICS Performance Evaluation Review**, Volume 30 Issue 3
Full text available: ▓ pdf(390.76 KB)   Additional Information: full citation, abstract, references

A performance model for a parallel I/O system is essential for detailed performance analyses, automatic performance optimization of I/O request handling, and potential performance bottleneck identification. Yet how to build a portable performance model for parallel I/O system is an open problem. In this paper, we present a machine-learning approach to automatic performance modeling for parallel I/O systems. Our approach is based on the use of a platform-independent performance metamodel, which i ...

5 Learning classifier systems and other genetics-based machine learning: Modeling systems with internal state using evolino
Daan Wierstra, Faustino J. Gomez, Jürgen Schmidhuber
June 2005 **Proceedings of the 2005 conference on Genetic and evolutionary computation GECCO '05**
Full text available: ▓ pdf(323.88 KB)   Additional Information: full citation, abstract, references, index terms

Existing Recurrent Neural Networks (RNNs) are limited in their ability to model dynamical systems with nonlinearities and hidden internal states. Here we use our general framework for sequence learning, EVOlution of recurrent systems with LINear Outputs (Evolino), to discover good RNN hidden node weights through evolution, while using linear regression to compute an optimal linear mapping from hidden state to output. Using the Long Short-Term Memory RNN Architecture, Evolino outperforms previous ...

Keywords: evolution and learning, recurrent neural networks, time-series prediction

6 Radial basis function networks in A+
Alexander Skomorokhov
June 2002 **ACM SIGAPL APL Quote Quad , Proceedings of the 2002 conference on APL: array processing languages: lore, problems, and applications**, Volume 32 Issue 4
Full text available: ▓ pdf(242.73 KB)   Additional Information: full citation, abstract, references

This paper discusses an implementation and application of Radial Basis Function (RBF) Networks. This type of neural networks performs a universal approach to function approximation. The same algorithm and program may be successfully applied to regression modeling or pattern classification. We illustrate the most important characteristics of RBF networks with a number of examples and discuss network behavior in depth. The software has been implemented in the A+ language, which became available to ...

7 Keynotes: Computational intelligence as an emerging paradigm of software engineering
Witold Pedrycz
July 2002 **Proceedings of the 14th international conference on Software engineering and knowledge engineering SEKE '02**
Full text available: ▓ pdf(124.06 KB)   Additional Information: full citation, abstract, references, index terms

Software Engineering is inherently knowledge intensive. Software processes and products are human centered. The technology of Computational Intelligence (CI) intensively exploits various mechanisms of interaction with humans and processes domain knowledge with intent of building intelligent systems. As commonly perceived, CI dwells on three highly synergistic technologies of neural networks, fuzzy sets (or granular computing, in general) and evolutionary optimization. As the software complexity ...

Keywords: computational intelligence, data visualization, genetic optimization, granular computing, neural networks, software quality, synergy, uncertainty representation

8 <u>Modeling methodology a: Optimization and response surfaces: Gaussian radial basis functions for simulation metamodeling</u>
Miyoung Shin, Robert G. Sargent, Amrit L. Goel
December 2002 **Proceedings of the 34th conference on Winter simulation: exploring new frontiers**
Full text available: pdf(361.18 KB)   Additional Information: <u>full citation, abstract, references</u>

This paper presents a novel approach for developing simulation metamodels using Gaussian radial basis functions. This approach is based on some recently developed mathematical results for radial basis functions. It is systematic, explicitly controls the underfitting and overfitting tradeoff, and uses a fast computational algorithm that requires minimal human involvement. This approach is illustrated by developing metamodels for the M/M/1 queueing system.

9 <u>On the implementation of RBF technique in neural networks</u>
M. T. Musavi, K. B. Faris, K. H. Chan, W. Ahmed
May 1991 **Proceedings of the conference on Analysis of neural network applications**
Full text available: pdf(513.17 KB)   Additional Information: <u>full citation, references, citings, index terms</u>

10 <u>Identifying prospective customers</u>
Paul B. Chou, Edna Grossman, Dimitrios Gunopulos, Pasumarti Kamesam
August 2000 **Proceedings of the sixth ACM SIGKDD international conference on Knowledge discovery and data mining**
Full text available: pdf(170.89 KB)   Additional Information: <u>full citation, references, citings, index terms</u>

Keywords: customer prospecting

11 <u>Technical session 1: content-based image retrieval: Learning an image manifold for retrieval</u>
Xiaofei He, Wei-Ying Ma, Hong-Jiang Zhang
October 2004 **Proceedings of the 12th annual ACM international conference on Multimedia**
Full text available: pdf(143.52 KB)   Additional Information: <u>full citation, abstract, references, index terms</u>

We consider the problem of learning a mapping function from low-level feature space to high-level semantic space. Under the assumption that the data lie on a submanifold embedded in a high dimensional Euclidean space, we propose a relevance feedback scheme which is naturally conducted only on the image manifold in question rather than the total ambient space. While images are typically represented by feature vectors in Rn, the natural distance is often different from the distance induced by t ...

Keywords: dimensionality reduction, image retrieval, manifold learning, riemannian structure, semantic space

12 <u>Performance bounds for nonlinear time series prediction</u>
Ron Meir

July 1997 **Proceedings of the tenth annual conference on Computational learning theory**
Full text available: ⬛ pdf(1.36 MB)   Additional Information: full citation, references, citings, index terms

13 A novel method for protein subcellular localization based on boosting and probabilistic ⬛ neural network
Jian Guo, Yuanlie Lin, Zhirong Sun
January 2004 **Proceedings of the second conference on Asia-Pacific bioinformatics - Volume 29 CRPIT '04**
Full text available: ⬛ pdf(106.36 KB)   Additional Information: full citation, abstract, references

Subcellular localization is a key functional characteristic of proteins. An automatic, reliable and efficient prediction system for protein subcellular localization is needed for large-scale genome analysis. In this paper, we introduce a novel subcellular prediction method combining boosting algorithm with probabilistic neural network algorithm. This new approach provided superior prediction performance compared with existing methods. The total prediction accuracy on Reinhardt and Hubbard's data ...

Keywords: amino acid composition, boosting, probabilistic neural network, subcellular localization

14 Exploring data mining implementation ⬛
Karim K. Hirji
July 2001 **Communications of the ACM**, Volume 44 Issue 7

Full text available: ⬛ pdf(101.20 KB)
                ⬛ html(40.65 KB)   Additional Information: full citation, references, citings, index terms, review

15 Real world applications: Interactive estimation of agent-based financial markets ⬛ models: modularity and learning
Ihsan Ecemis, Eric Bonabeau, Trent Ashburn
June 2005 **Proceedings of the 2005 conference on Genetic and evolutionary computation GECCO '05**
Full text available: ⬛ pdf(435.60 KB)   Additional Information: full citation, abstract, references, index terms

Building upon the interactive inversion method introduced by Ashburn and Bonabeau (2004), we show how to dramatically improve the results by exploiting modularity and by letting the computer learn user preferences.

Keywords: agent-based modeling, interactive evolution

16 Special issue on special feature: Ranking a random feature for variable and feature ⬛ selection
Hervé Stoppiglia, Gérard Dreyfus, Rémi Dubois, Yacine Oussar
March 2003 **The Journal of Machine Learning Research**, Volume 3

Full text available: ⬛ pdf(103.01 KB)   Additional Information: full citation, abstract, citings, index terms

We describe a feature selection method that can be applied directly to models that are linear with respect to their parameters, and indirectly to others. It is independent of the target machine. It is closely related to classical statistical hypothesis tests, but it is more intuitive, hence more suitable for use by engineers who are not statistics experts.

Furthermore, some assumptions of classical tests are relaxed. The method has been used successfully in a number of applications that are brie ...

17 Bioinformatics: Weave amino acid sequences for protein secondary structure prediction

Xiaochun Yang, Bin Wang

June 2003 **Proceedings of the 8th ACM SIGMOD workshop on Research issues in data mining and knowledge discovery**

Full text available: pdf(160.75 KB)　　Additional Information: full citation, abstract, references, index terms

Given a known protein sequence, predicting its secondary structure can help understand its three-dimensional (tertiary) structure, i.e., the folding. In this paper, we present an approach for predicting protein secondary structures. Different from the existing prediction methods, our approach proposes an encoding schema that weaves physio-chemical information in encoded vectors and a prediction framework that combines the context information with secondary structure segments. We employed Support ...

Keywords: SVM, encoding schema, protein secondary structure, protein structure prediction

18 Learning evaluation functions to improve optimization by local search

Justin Boyan, Andrew W. Moore

September 2001 **The Journal of Machine Learning Research**, Volume 1

Full text available: pdf(643.21 KB)　　Additional Information: full citation, abstract, citings

This paper describes algorithms that learn to improve search performance on large-scale optimization tasks. The main algorithm, STAGE, works by learning an evaluation function that predicts the outcome of a local search algorithm, such as hillclimbing or Walksat, from features of states visited during search. The learned evaluation function is then used to bias future search trajectories toward better optima on the same problem. Another algorithm, X-STAGE, transfers previously learned evaluation ...

19 Industrial/government track: Frequent-subsequence-based prediction of outer membrane proteins

Rong She, Fei Chen, Ke Wang, Martin Ester, Jennifer L. Gardy, Fiona S. L. Brinkman

August 2003 **Proceedings of the ninth ACM SIGKDD international conference on Knowledge discovery and data mining**

Full text available: pdf(166.07 KB)　　Additional Information: full citation, abstract, references, index terms

A number of medically important disease-causing bacteria (collectively called Gram-negative bacteria) are noted for the extra "outer" membrane that surrounds their cell. Proteins resident in this membrane (outer membrane proteins, or OMPs) are of primary research interest for antibiotic and vaccine drug design as they are on the surface of the bacteria and so are the most accessible targets to develop new drugs against. With the development of genome sequencing technology and bioinformatics, bio ...

Keywords: association rule, classification, outer membrane protein, subcellular localization, support vector machine

20 A training algorithm for optimal margin classifiers

Bernhard E. Boser, Isabelle M. Guyon, Vladimir N. Vapnik

July 1992 **Proceedings of the fifth annual workshop on Computational learning theory**

Full text available: pdf(1.00 MB)　　Additional Information: full citation, abstract, references, citings, index terms

A training algorithm that maximizes the margin between the training patterns and the decision boundary is presented. The technique is applicable to a wide variety of the classification functions, including Perceptrons, polynomials, and Radial Basis Functions. The effective number of parameters is adjusted automatically to match the complexity of the problem. The solution is expressed as a linear combination of supporting patterns. These are the subset of training patterns that are closest t ...

Results 1 - 20 of 100   Result page: **1**   2   3   4   5   6   next

P⊘RTAL
USPTO

THE ACM DIGITAL LIBRARY

℃ Feedback Report a problem Satisfaction survey

Terms used radial basis neural network predict or predicting wear or fatigue

Found 2 of 158,639

| Sort results by | relevance ▼ |
| Display results | expanded form ▼ |

◆ Save results to a Binder
? Search Tips
☐ Open results in a new window

Try an Advanced Search
Try this search in The ACM Guide

Results 1 - 2 of 2

Relevance scale ☐☐▭▬■

1 Keynotes: Computational intelligence as an emerging paradigm of software engineering ▬
Witold Pedrycz
July 2002 **Proceedings of the 14th international conference on Software engineering and knowledge engineering SEKE '02**
Full text available: 📄 pdf(124.06 KB)   Additional Information: full citation, abstract, references, index terms

Software Engineering is inherently knowledge intensive. Software processes and products are human centered. The technology of Computational Intelligence (CI) intensively exploits various mechanisms of interaction with humans and processes domain knowledge with intent of building intelligent systems. As commonly perceived, CI dwells on three highly synergistic technologies of neural networks, fuzzy sets (or granular computing, in general) and evolutionary optimization. As the software complexity ...

Keywords: computational intelligence, data visualization, genetic optimization, granular computing, neural networks, software quality, synergy, uncertainty representation

2 Session 5: novel interaction: MAUI: a multimodal affective user interface ▬
Christine L. Lisetti, Fatma Nasoz
December 2002 **Proceedings of the tenth ACM international conference on Multimedia**
Full text available: 📄 pdf(377.18 KB)   Additional Information: full citation, abstract, references, citings

Human intelligence is being increasingly redefined to include the all-encompassing effect of emotions upon what used to be considered 'pure reason'. With the recent progress of research in computer vision, speech/prosody recognition, and bio-feedback, real-time recognition of affect will enhance human-computer interaction considerably, as well as assist further progress in the development of new emotion theories.In this article, we describe how affect, moods and emotions closely interact with co ...

Keywords: affect recognition, emotions, intelligent interfaces, interface agent

Results 1 - 2 of 2

Useful downloads: Adobe Acrobat   QuickTime   Windows Media Player   Real Player